

**What is claimed is:**

1. A liquid fuel reforming and blending method, wherein after heavy oils are dissolved in alkanes, the alkanes being polyaromatic alkanes (C<sub>9</sub>~C<sub>20</sub>), the blending method is utilized to form a fuel applicable for usage in diesel oil combustion systems and slow-speed diesel engine systems; and is characterized in that: the alkanes and the heavy oils are blended in percentage proportions by weight ranging from 10% to 90%, which thereby achieves a flash point temperature of above 45°C; thus by means of the reforming and blending method, and after blending the heavy oils and the alkanes, a new type heavy fuel oil is converted therefrom, thereby increasing economical value of the heavy oils.
2. The liquid fuel reforming and blending method according to claim 1, wherein the alkanes and the heavy oils are blended in a preferred proportion by weight of 50%~50%.
3. The liquid fuel reforming and blending method according to claim 1, wherein the preferred flash point of the liquid fuel achieves a temperature of 55°C~75°C.
4. The liquid fuel reforming and blending method according to claim 1, wherein the heavy oils utilized can be C-class waste heavy oil

products including waste engine oil, waste grease, waste edible oils, animal and vegetable oils or boiler fuel.

5. The liquid fuel reforming and blending method according to claim 1, wherein reforming oil from bottom of a gasoline tower or reforming oil from bottom of an aromatics tower achieves following specifications:
- 5     polyaromatic alkanes (containing at least 40% aromatic alkanes);
- flash point of above 45°C;
- initial boiling point of above 160°C;
- final boiling point ranging from 360°C to 480°C;
- 10    specific gravity ranging from 0.75 to 0.99.
6. A liquid fuel reforming and blending method, wherein after the heavy oils are dissolved in the alkanes, the blending method is utilized to form the fuel applicable for usage in diesel oil combustion systems and slow-speed diesel engine systems; and is characterized in that:
- 15    the polyaromatic alkanes C<sub>9</sub>~C<sub>20</sub> and the heavy oils are blended in preferred proportions ranging from 10% to 90%, which thereby achieves the flash point temperature of above 45°C, thus by means of the reforming and blending method, after blending the heavy oils and the alkanes, a new type heavy fuel oil is converted therefrom, thereby
- 20    increasing economical value of the heavy oils.

7. The liquid fuel reforming and blending method according to claim 6,  
wherein the alkanes and the heavy oils are blended in a preferred  
proportion by weight of 50%~50%.
8. The liquid fuel reforming and blending method according to claim 7,  
5 wherein the preferred flash point of the liquid fuel achieves a  
temperature of 55°C~75°C.
9. The liquid fuel reforming and blending method according to claim 8,  
wherein the heavy oils utilized can be C-class waste heavy oil  
products including waste engine oil, waste grease, waste edible oils,  
10 animal and vegetable oils or boiler fuel.
10. The liquid fuel reforming and blending method according to claim 9,  
wherein reforming oil from the bottom of the gasoline tower or  
reforming oil from the bottom of the aromatics tower achieves  
following specifications:
- 15 polyaromatic alkanes (containing at least 40% aromatic alkanes);  
flash point of above 45°C;  
initial boiling point of above 160°C;  
final boiling point ranging from 360°C to 480°C;  
specific gravity ranging from 0.75 to 0.99.